



## WATER DISTIRBUTION SYSTEM EXTENSION OR MODIFICATION APPLICATION (INSTRUCTIONS)

The City of Concord will not accept this application unless all of the following instructions are adhered to: Prior to the submittal of an application package for public and privately maintained and operated water distribution system extensions/modifications, the civil engineering design drawings shall be approved through the appropriate technical review process as required by the Director of Engineering and defined by the City of Concord Development Ordinance. The design drawings must be prepared in accordance with Subchapter 15A NCAC 18C of the North Carolina Administrative Code, the Water and Sewer Authority of Cabarrus County's "Standard Specifications for Wastewater Collection and Water Distribution Construction for Cabarrus County," the City of Concord Code of Ordinances, and good engineering practices. Failure to submit all of the required items will lead to additional fees and processing and review time for the application.

A. **Application Form:** (All Application Packages): **A SEPARATE APPLICATION MUST BE COMPLETED FOR EACH PUBLIC WATER SUPPLY SYSTEM AND PRIVATE WATER SERVICE SYSTEMS. DO NOT COMBINE THE PUBLIC AND PRIVATE WATER SYSTEM INFORMATION ON THIS APPLICATION. (See section D(1))**

- ☐ Submit one original and one copy of the completed and appropriately executed application form. Incomplete applications may result in the application being returned. The City of Concord will only accept application packages that have been fully completed with all applicable items addressed.
- ☐ The project name should be consistent with the project name on the plans and supporting data.
- ☐ If this project involves a modification of an existing "Authorization to Construct," submit one copy of the existing "Authorization to Construct." Please note that modifications must meet current design standards.

B. **Application Fee:** (All Application Packages):

- ☐ Submit a check made payable to the "City of Concord" in the amount as required by the current "City of Concord Fiscal Year Fees and Charges Schedule" A copy current City of Concord Fiscal Year Fees and Charges Schedule can be viewed on the City of Concord web page at [www.ci.concord.nc.us](http://www.ci.concord.nc.us) under "Departments" – "Finance" - "Adopted Fees Schedule"

C. **Detailed Plans and Specifications:** (All Application Packages):

- ☐ Submit **four (4)** sets of the approved detailed plans signed, sealed, and dated by a N.C. Professional Engineer. The Water and Sewer Authority of Cabarrus County's "Standard Specifications for Wastewater Collection and Water Distribution Construction for Cabarrus County" and the City of Concord Development Ordinance and Code of Ordinances Utilities Article and Technical Specifications must be adhered to without exception. **Use of the Water and Sewer Authority of Cabarrus County's (WSACC) "Standard Specifications for Wastewater Collection and Water Distribution Construction for Cabarrus County," and the City of Concord Development Ordinance, Code of Ordinances Chapter 62 and Technical Standards must be noted on each sheet of the plans.**
- A current copy of the Water and Sewer Authority of Cabarrus County's (WSACC) "Standard Specifications for Wastewater Collection and Water Distribution Construction for Cabarrus County" can be viewed on the WSACC web page at [www.wsacc.org](http://www.wsacc.org) under "Departments" – "Engineering" – "Standard Specifications" or a copy can be obtained from the WSACC.
- A current copy of the City of Concord Code of Ordinances can be viewed on the City of Concord web page at [www.ci.concord.nc.us](http://www.ci.concord.nc.us) under "Government" – "City Ordinance".
- A current copy of the City of Concord Development Ordinances can be viewed on the City of Concord web page at [www.ci.concord.nc.us](http://www.ci.concord.nc.us) under "Departments" – "Development Services" – "Development Ordinance".
- For a current copy of the City of Concord details and other technical standards, please access the City of Concord web page at [www.ci.concord.nc.us](http://www.ci.concord.nc.us) under "Departments" – "Engineering" – "Forms and Downloads" or a copy can be obtained from the Engineering Department.
- ☐ Plans must include the following minimum items: a general location map, a North arrow, street and waterbody names, a scale, the 100-year flood elevation, existing rights-of-way and easements, setback limits, elevation control markers and

monuments, stationing, pipe material, fittings, plan and profile views of the water distribution system extension as well as the proximity of the water line to other (proposed/existing) utilities and natural features, structures, sedimentation/erosion control, storm drainage systems, and detail drawings of all items pertinent to the water distribution system extension. Depict minimum separations required in 15A NCAC 18C .0906 on the plans, and note the use of ferrous pipe material with joints equivalent to water main standards if minimum separations are not met. Minimum cover over water lines in accordance with 15A NCAC 18C .0904 and the City of Concord Code of Ordinances must also be shown clearly on the plans.

- ☐ Cross connection control in accordance with the City of Concord Water Resource Department's "Backflow Prevention Ordinance and Cross Connection Control Ordinance" must be specified on the drawings and details provided.
  - A copy current City of Concord Backflow Manual and details can be viewed on the City of Concord web page at [www.ci.concord.nc.us](http://www.ci.concord.nc.us) under "Departments" – "Water Resources" – "Backflow Prevention Manual" or a copy can be obtained from the Water Resources Department.
  - ☐ Plans must not be labeled with preliminary phrases (e.g., FOR REVIEW ONLY, NOT FOR CONSTRUCTION, etc.) that indicate that they are anything other than final plans.
- D. **Engineering Calculations** (All Application Packages):
- ☐ Submit two sets of hydraulic design calculations signed, sealed, and dated by a N.C. Professional Engineer for the proposed public water system and domestic service and fire service, as applicable.
  - ☐ The proposed extension shall be able to produce the required fire flows, including but not limited to any necessary pumping or storage, throughout the proposed extension without negatively impacting the existing system. Documentation of this ability shall be submitted to the Director of Engineering or his/her designee for approval.
- E. **Environmental Assessments** (If required – by 15A NCAC 1C .0100):
- ☐ Submit one copy of the Findings of No Significant Impact (FONSI) or Environmental Impact Statement (EIS). Also, include information on any mitigating factor(s) from the Environmental Assessment (EA) that impact the construction of the subject water lines. An EA may also be required for private systems if any public funds are used for the construction of the subject water lines.
- F. **City of Concord Water System-Supplied Information Report:** Attach a copy of the most current **City of Concord Water System-Supplied Information Report** to this application. The form can be obtained on the City of Concord Engineering web page under "Forms & Downloads" at [www.concordnc.gov](http://www.concordnc.gov)
- ☐ Submit one copy

**THE COMPLETED APPLICATION PACKAGE, INCLUDING ALL SUPPORTING INFORMATION AND MATERIALS, SHOULD BE DELIVERED TO THE FOLLOWING ADDRESS:**

**CITY OF CONCORD  
Development Services Department  
Post Office Box 308  
Concord, North Carolina 28026-0308  
Telephone Number: (704) 920-5142**



## WATER DISTRIBUTION SYSTEM EXTENSION OR MODIFICATION APPLICATION

*(THIS FORM MAY BE PHOTOCOPIED FOR USE AS AN ORIGINAL)*

TO BE COMPLETED BY THE CITY OF CONCORD	
DSD Case No:	
Project No:	
ATC No:	

<b>A. Project Information</b>	<b>Project Title:</b> (Project name of title as indicated on the drawings)				
	1.)				
	<b>Description of project location:</b>				
	2.)	( Site located on (Road name) SR ##### approximately ##### linear feet (North, South, West or East)of the intersection of Road name (SR #####) and Road Name (SR ##### )			
	<b>Cabarrus County Parcel Identification Number:</b>		<b>4a.) Parcel Acreage:</b>		
	4.)				
	<b>Site Zoning and use:</b>		<b>5a.) Min. Fire Flow</b> (Based on Site Zoning and use)	<b>gpm @ 20 psi</b>	
	5.)				
<b>6.) Area Commercial or Industrial Building</b>			<b>6a.) Estimated Water Usage:</b>		<b>% Domestic</b>
					<b>% Commercial</b>
					<b>% Industrial</b>
					<b>% Other use(Specify) _____</b>
6.)	(sq. ft.)				
7a.)	<b>Description of Facility to be served.</b>		<b>7b.) Number of Lots</b>		<b>7c.) Number of Units</b>
7d.)	<b>Additional description information:</b>				
<b>B. Applicant Information</b>					
	(Name of owner, board, council, authorized official and title)		(Street or Box Number)		
	(Name of owner's company, city, town, corporation, sanitary district, water company or other)		(City, State, Zip Code)		
	(Phone Number)		(Facsimile Number)		
(Name and affiliation of contact person, who can answer questions about application)		(Email Address)			

<b>C. Design Engineer Information</b>		
	(Typed name of North Carolina Professional Engineer)	(Company Name)
	(NCPE Registration Number)	(Street or Box Number)
	(Phone Number)	(City, State, Zip Code)
	(Name and affiliation of contact person, who can answer questions about application)	(Email Address)

<b>D. Applicant Information</b>	1.) Water system shall be: <div style="text-align: center;"> <input type="checkbox"/> Public (Complete D-2 &amp; Skip Item D-2a &amp; b.)  (Public Water System is any water system that will be City maintained and operated) </div> <div style="text-align: center;"> <input type="checkbox"/> Private (Complete D-2 &amp; Items D-2a.)  (Private Water System is any water system that will be applicant maintained and operated) </div>	
	***** <b>IMPORTANT</b> *****	
	A SEPARATE APPLICATION MUST BE COMPLETED FOR EACH PUBLIC WATER SUPPLY SYSTEM AND PRIVATE WATER SERVICE SYSTEMS. DO NOT COMBINE THE PUBLIC AND PRIVATE WATER SYSTEM INFORMATION ON THIS APPLICATION.	
	2.) Project is:	<input type="checkbox"/> New  <input type="checkbox"/> Modification (of an existing Authorization to Construct) If Modification, specify the ATC Number: _____
	2a.) If private, applicant will be:	2b.) If <u>water system is sub-metered</u> , facilities owned by _____ a (must choose <u>one</u> )
	<input type="checkbox"/> Retaining Ownership (i.e. store, church, single office, etc.) <b>or</b> <input type="checkbox"/> Leasing units (lots, townhomes, etc. - <b>skip Item D(2b)</b> ) <input type="checkbox"/> Selling units (lots, townhomes, etc. - <b>complete Item D(2b)</b> )	<input type="checkbox"/> Public Utility <input type="checkbox"/> Homeowner Assoc./Developer
	3.) <u>City of Concord</u> Owner of Water Distribution System Supplying Potable Water To This Project	
	4a.) <u>City of Concord Water System</u> Name of Water System	4b.) <u>01-13-010</u> Public Water Supply Identification No.
4c.) <u>10-00772</u> WSMP No:	4d.) <u>September 1, 2010</u> WSMP Submittal Date:	
4e.) By my signature below, I, <u>M. Sue Hyde, Director of Engineering</u> , certify that the previously submitted WSMP contains the information required by 15A NCAC 18C .0307(c) for the project defined in the attached engineering plans and specifications.		
(Signature of Engineering Director)		
(Date)		

E. Engineer's Report	
1a.) _____ Owner of the Existing Water Main at Tie-in(s)	1b.) _____ Existing Water Main Diameter(s)
2.) Volume of water demand <u>to be allocated</u> for this particular project: _____ gallons per day *Water demand shall be calculated in accordance with values defined in table b (1) or by (2) in 15A NCAC 18C .0409 (Do not include future demands or previously allocated water demand.)	

3.) If the water demand is zero, indicate why:

- ☐ Transmission Mains or hydraulic loops where water demand will be allocated in subsequent approvals that connect to this extension
- ☐ Water demand has already been allocated in ATC Number: \_\_\_\_\_
- ☐ Rehabilitation or replacement of existing water mains with no new water demand expected (see 15A NCAC 18C to determine if an application is required)

4.) Provide the water demand calculations used in determining the allocated potable water demand in accordance with the value indicated in Item E(2) **AND/OR** the design demand for transmission main or hydraulic loop main sizing if zero demand is being requested in Item E(3). Values other than that in defined in table b(1) or by (2) in 15A NCAC 18C .0409 must be supported with actual water use data.

5.) Summary of **water mains** to be constructed (attach additional sheets if necessary)

Diameter (in.)	Length (lin. ft.)	Low Elevation (ft.)	High Elevation (ft.)	Quantity of the Main-line Valves

6.) Number of hydrant with guard valves	7a.) Number of air-release valves	7b.) Station location of air-release valves	7c.) Elevation of air-release valves

### General Water System Hydraulic Information

8.) **Closest existing fire hydrant - (Include location on hydraulic calculation plans for reference)**

Road name/location and distance from project tie-in.	Static Pressure (Pounds per sq. in.)	Flow Rate (gpm)	Residual Pressure (Pounds per sq. in.)	Flow @ 20 psi (gpm)

**\*(Attach fire test report(s) to application)**

9.) **Applicable Pressure Zone - (Elevated Storage Tank)**

Name	Location	Base Elevation	Distance from proposed water system connection. (miles):

**\*(Attach sealed hydraulic calculation report(s) with exhibits to application)**

DESIGN COMPLIANCE CERTIFICATION	
	<p>10.) Does the subject water distribution system comply with the (latest version) of State of North Carolinas' Administrative Code, Subchapter 15A NCAC 18C, the Water and Sewer Authority of Cabarrus County Standard technical Specifications for wastewater Collection and Water Distribution Construction for Cabarrus County, and the City of Concord Development Code, Code of Ordinances, Policies and Technical Standards; as applicable?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <b>If No, to City of Concord Design Standards; please reference the pertinent minimum design criteria and indicate why an exception is requested. SUBMIT TWO COPIES OF SPECIFICATIONS OR CALCULATIONS PERTINENT TO THE EXCEPTION WITH YOUR APPLICATION.</b></p>
F. OTHER PERMITS	<p>11.) Have the following permits/certifications been submitted for approval for the proposed water system or the associated project to be served by the water system? <b>If "yes," submit a copy of all applicable permits.</b></p>
	<p>US Army Corp 404 or NCDENR DWQ 401wetland permit? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
	<p>Sedimentation and Erosion Control Plan? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
	<p>Stormwater Management Permit? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p> <p>NCDOT ENCROACHMENT? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</p>
	<p><b>*(Attach a copy of the most current City of Concord Water System-Supplied Information Report to application. The report can be obtained from the City of Concord Engineering Department Web page at <a href="http://www.concordnc.gov">www.concordnc.gov</a> under "Forms And Downloads".)</b></p>

### City of Concord Certification: TO BE COMPLETED BY THE CITY OF CONCORD

These plans and specifications cited in the foregoing application, including any provisos in the approval letter, are approved insofar as the protection of public health is concerned as provided in the rules, standards and criteria adopted under the authority of NCGS 130A-315 and 130A-317. This approval does not address all applicable laws, rules, standards and criteria, and other approvals and licenses that may be required by the local, state or federal government. This approval is given with the understanding that upon installation of such works, its operation shall be placed under the care of a competent person, and the operation shall be carried out according to best accepted practice and in accordance with the recommendations of the City of Concord through the delegated authority of Division of Environmental Health.

Any erasures, additions or alterations of the proposed improvements except those permitted in 15A NCAC 18C .0306 will make this approval null and void. This approval does not constitute a warranty of the design, construction or future operation of the water system. THE CITY AND ITS STAFF ARE NOT RESPONSIBLE FOR ERRORS IN DESIGNS, CALCULATIONS, DRAWINGS OR STATEMENTS SUBMITTED BY APPLICANTS, THEIR TECHNICAL CONSULTANTS, SURVEYORS OR ENGINEERS. THE CITY AND ITS STAFF ARE NOT RESPONSIBLE FOR FINDING OR CORRECTING ANY ERRORS OR DEFICIENCIES IN PLANS SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL. THE CITY OF CONCORD DISCLAIMS ANY LIABILITY FOR ERRORS CONTAINED IN PLANS SUBMITTED TO THE CITY. THE SIGNATURE OF THE CITY ENGINEER MAY NOT BE RELIED UPON TO ESTABLISH ANY DUTY OR RELATIONSHIP (SUCH AS A THIRD PARTY BENEFICIARY) WITH ANY PARTY USING THIS PLAN OR DRAWING. PARTIES USING THIS DOCUMENT SHOULD CONDUCT THEIR OWN REVIEW AND ANALYSIS FOR MAKING DECISIONS IN RELIANCE ON THIS DOCUMENT.

The official copies of plans and specifications accompanying this application have been sealed and stamped with the

Authorization to Construct (ATC) number for this application \_\_\_\_\_.

I, **M. Sue Hyde, P.E.**, attest that this application has been reviewed by me and contains sufficient information to ascertain reasonable grounds to believe the application package and its contents meet all applicable standards of Subchapter 15A NCAC 18C, the State of North Carolina's Administrative Code, the Water and Sewer Authority of Cabarrus County Standard Specifications and the City of Concord's ordinance, policies and specifications as presented. The denial of the issuance of a permit, subject to the provisions in Article III, Chapter 62 of the City of Concord Code of Ordinances shall be made in writing and shall contain the reasons for the denial and the City's estimate of the general changes in the applicant's proposed activities or plan which will be required in order that the applicant may obtain a permit. Nothing in such estimate shall preclude or otherwise bar the City from denying a permit, which incorporates such changes, based upon changed circumstances or information not previously known by the Director of Engineering or the applicant.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

M. Sue Hyde, PE, Director of Engineering

### Professional Engineer's Certification:

As a duly registered Professional Engineer in the State of North Carolina, I certify that this application has been reviewed by me and is accurate, complete and consistent with the information supplied in the engineering plans, calculations, and all other supporting documentation to the best of my knowledge. I further attest that to the best of my knowledge the proposed design and supporting documentation has been prepared in accordance with and subject to the Water and Sewer Authority of Cabarrus County's standard specifications; the City of Concord's ordinances, policies, and standard specifications, and the North Carolina Administrative Code for water distribution systems. In the event of conflict between the Water and Sewer Authority of Cabarrus County's standard specifications; the City of Concord's ordinances, policies, and standard specifications, or the North Carolina Administrative Code, the more restrictive requirements shall apply. Although other professionals may have developed certain portions of this submittal package, inclusion of these materials under my signature and seal signifies that I have reviewed this material and have judged it to be consistent with the proposed design. Although the attached City of Concord Water System Supplied information report incorporates data provided by others, inclusion of these materials under my seal signifies that I have reviewed this material and have judged it to be consistent with the proposed design. Note: In accordance with NC General Statutes 143-215.6A and 143-215.6B, any person who knowingly makes any false statement, representation, or certification in any application shall be guilty of a Class 2 misdemeanor, which may include a fine not to exceed \$10,000 as well as civil penalties up to \$25,000 per violation, and referral to the State Board of Registered Professional Engineers and Surveyors.

_____ (Signature of North Carolina Professional Engineer)	_____ (Company Name)
_____ (Type Name Signed Above)	_____ (Street or Box Number)
_____ (NCPE Registration Number)	_____ (City, State, Zip Code)
_____ (Seal & Signature Date)	_____ (Email Address)
_____ (Phone Number)	_____ (Facsimile Numbers)
	<div style="border: 1px solid black; height: 150px; width: 100%;"></div>

(Engineer's seal)

### Developer's Certification:

This application is made under and in full accord with the provision of NCGS 130A-317, and such other statutes as related to public water systems. The applicant agrees that no change or deviation from the engineering plans and specifications approved by the Division of Environmental Health will be made except as allowed by 15A NCAC 18C .0306 or with the written consent and approval of the City of Concord Director of Engineering or the Directors' authorized representative. The applicant agrees that a professional engineer licensed to practice in the State of North Carolina shall submit a statement reflecting that adequate observations during and upon completion of construction, by the engineer or by a representative of the engineer's office who is under the engineer's supervision, indicates that construction was completed in accordance with approved plans and specifications. I understand that if all required parts of this application are not completed and that if all required supporting information and attachments are not included, this application package will be returned to me as incomplete. Any application package determined incomplete by the Director of Engineering shall be returned to the applicant. Revised engineering plans and specifications shall constitute a re-submittal, shall be accompanied by a new fee, and shall require additional time for review. Note: In accordance with NC General Statutes 143-215.6A and 143-215.6B, any person who knowingly makes any false statement, representation, or certification in any application shall be guilty of a Class 2 misdemeanor, which may include a fine not to exceed \$10,000 as well as civil penalties up to \$25,000 per violation.

_____ (Signature of Owner, Manager, Mayor or Chairman)	_____ (Street or Box Number)
_____ (Type Name Signed Above)	_____ (City, State, Zip Code)
_____ (Phone Number )	_____ (Email Address)